

Amendments to the Claims:

This listing will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-53. Cancelled.

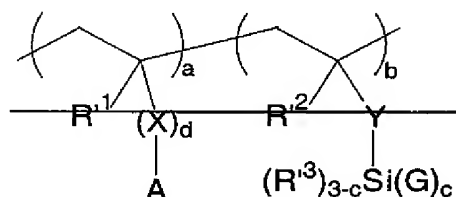
54. (Currently amended) An electrophotographic element according to claim 81, wherein comprising:

~~an electrically conducting layer;~~

~~a charge generating layer overlying said electrically conducting layer;~~

and

~~a first charge transport layer overlying said electrically conducting layer;~~ said first charge transport layer comprises a silsesquioxane of the condensed reaction product of ~~a~~ the charge transport polymer ~~comprising structural units having the formula:~~



~~wherein:~~

~~A is a tertiary arylamine charge transport moiety;~~

~~X is a divalent bridging moiety;~~

~~Y is a divalent bridging moiety;~~

~~R'1 and R'2 are independently hydrogen or a C1-4 alkyl;~~

~~G is independently a hydrolyzable group;~~

~~R'3 is independently a C1-18 alkyl, a C1-10 fluoroalkyl, or a C6-12 substituted or unsubstituted aryl;~~

~~e is an integer from 1 to 3;~~

~~d is 0 or 1;~~

~~a is a mole fraction of from about 0.01 to about 0.99;~~

~~b is a mole fraction of from about 0.99 to about 0.01;~~

~~a + b is 1.00 or less; and~~

from about 5 to 30 weight percent of basic surface charge colloidal silica based on the weight of the silsesquioxane, wherein the basic surface charge colloidal silica is stabilized with a sodium salt of silanol, and condensation is catalyzed by acetic acid, with optionally at least one additional silane monomer having at least one functional group thereon.

55. (Original) The electrophotographic element of Claim 54 wherein G is selected from halogen, hydroxyl, or C₁₋₆ alkoxy groups.

56. (Original) The electrophotographic element of Claim 54 wherein the tertiary amine charge transport moiety has an oxidation potential of from about 0.6 to about 1.2 volts versus a standard calomel electrode.

57. (Original) The electrophotographic element of Claim 54 wherein d is 1.

58. (Previously Presented) The electrophotographic element of Claim 57 wherein X is selected from the group consisting of an ester residue -COO- or -OCO-; oxygen; an arylene moiety having up to about 18 carbon atoms; an alkylene moiety having up to about 6 carbon atoms; and combinations thereof.

59. (Previously Presented) The electrophotographic element of Claim 54 wherein Y is selected from the group consisting of an ester residue -COO- or -OCO-; oxygen; an arylene moiety having up to about 18 carbon atoms; an alkylene moiety having up to about 6 carbon atoms; and combinations thereof.

60. (Original) The electrophotographic element of Claim 54 wherein a is from about 0.1 to about 0.9.

61. (Original) The electrophotographic element of Claim 54 wherein a is from about 0.15 to about 0.85.

62. (Original) The electrophotographic element of Claim 54 wherein a is from about 0.25 to about 0.8.

63. (Withdrawn) The electrophotographic element of Claim 54 wherein c is 2.

64. (Original) The electrophotographic element of Claim 54 wherein c is 3.

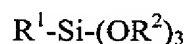
65. (Original) The electrophotographic element of Claim 54 wherein R^{'1} and R^{'2} are independently hydrogen or methyl.

66. (Original) The electrophotographic element of Claim 64 wherein G is methoxy.

67. (Original) The electrophotographic element of Claim 54 wherein the optional at least one silane monomer is present.

68. (Original) The electrophotographic element of Claim 67 wherein the at least one silane monomer is an alkyltrialkoxysilane.

69. (Previously Presented) The electrophotographic element of Claim 67 wherein the at least one silane monomer is at least one alkyltrialkoxysilane corresponding to the formula:



wherein

R^1 is an aliphatic, cycloaliphatic, or aromatic group containing up to about 18 carbon atoms, and

R^2 is an alkyl group containing 1 to about 6 carbon atoms.

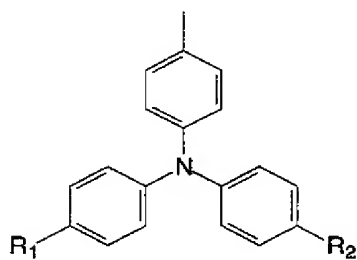
70. (Previously Presented) The electrophotographic element of Claim 69 wherein R^1 is selected from the group consisting of alkyls containing up to about 18 carbon atoms, fluoroalkyl containing up to about 18 carbon atoms, cycloalkyl containing 5 to about 12 carbon atoms, and aryl containing 6 to about 12 carbon atoms.

71. (Original) The electrophotographic element of Claim 69 wherein R^1 is an alkyl group containing 1 to about 3 carbon atoms.

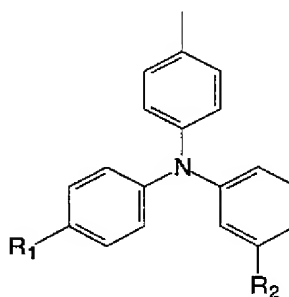
72. (Original) The electrophotographic element of Claim 69 wherein R^1 is a methyl group.

73. (Original) The electrophotographic element of Claim 67 wherein the at least one silane monomer is methyltrimethoxysilane.

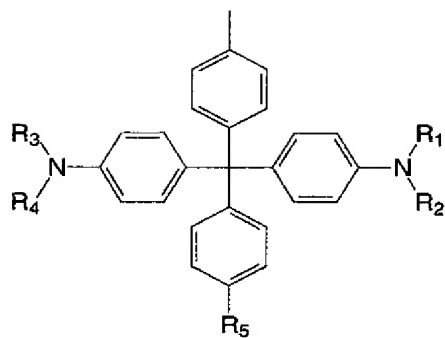
74. (Previously Presented) The electrophotographic element of Claim 54 wherein A is selected from the group consisting of:



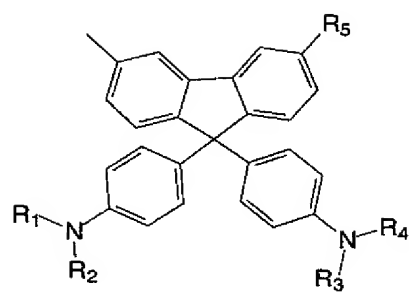
CTM I



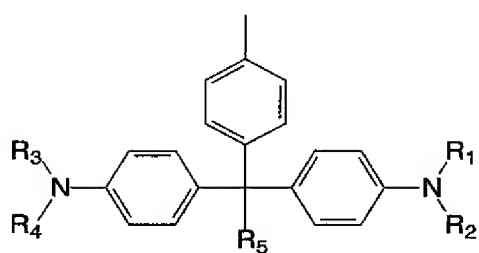
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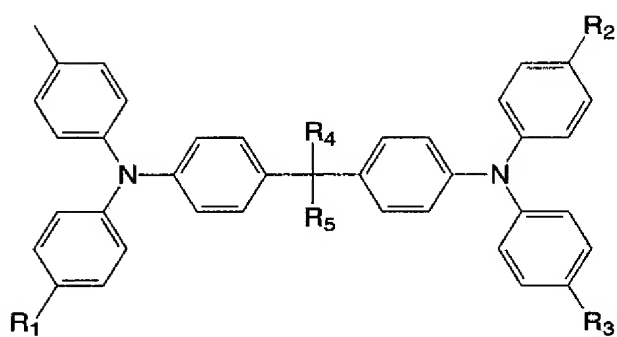
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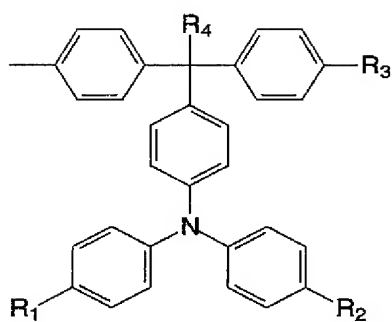
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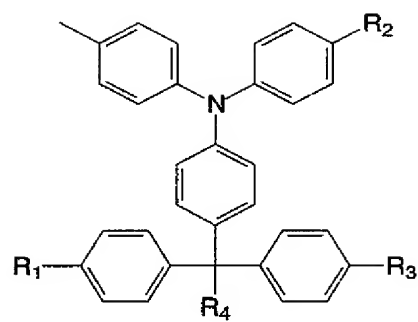
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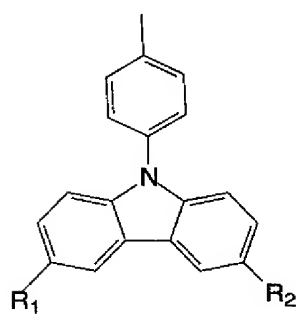
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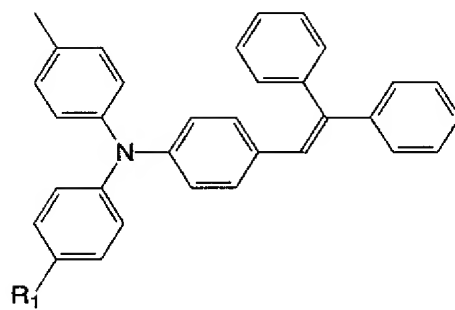
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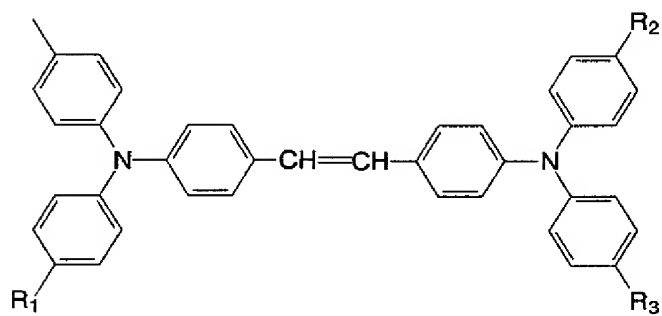
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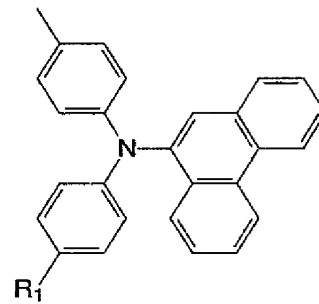
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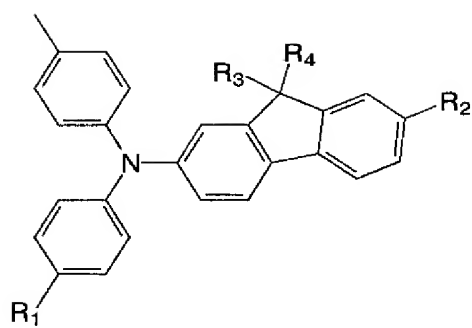
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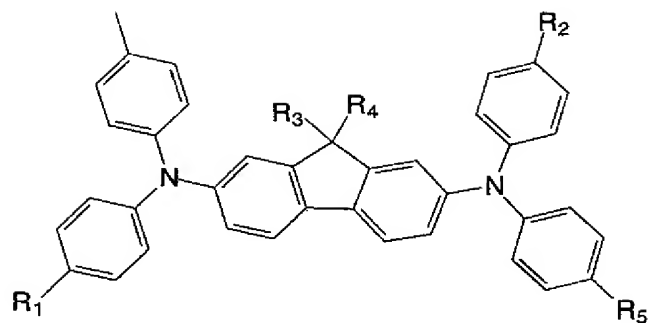
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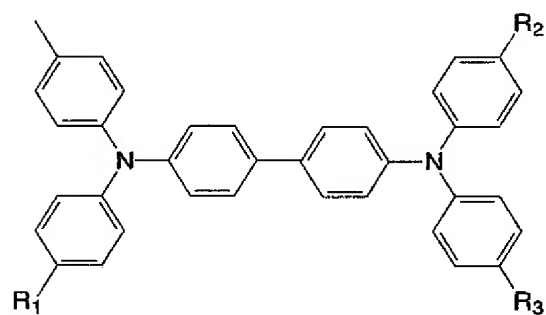
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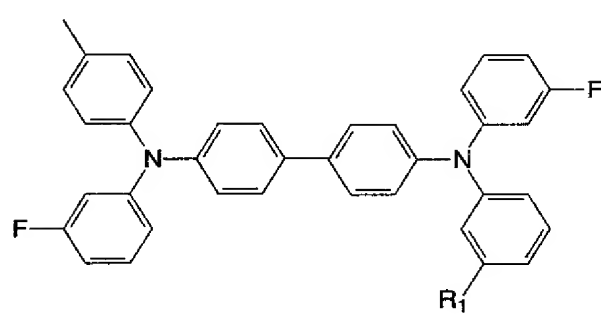
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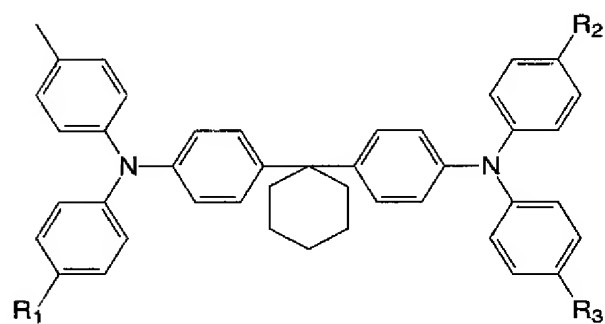
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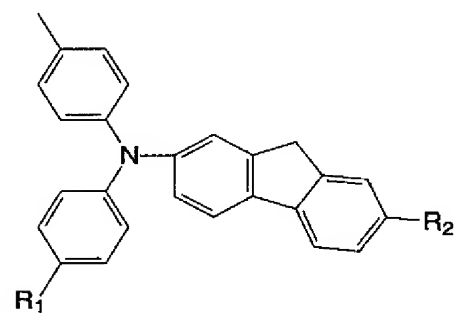
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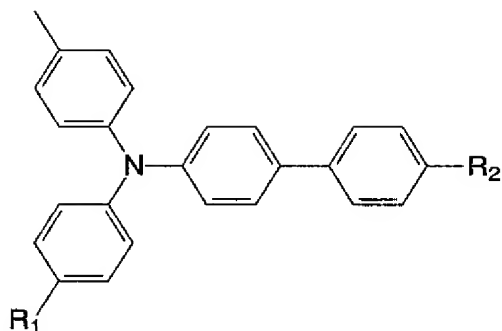
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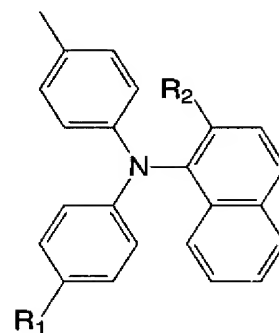
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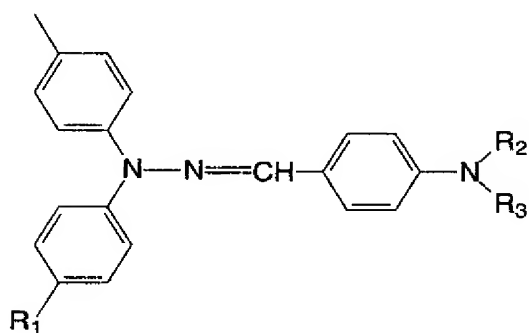
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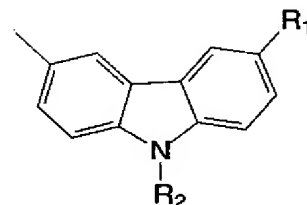
CTM XIX



CTM XX



CTM XXI



CTM XXII

and mixtures thereof, wherein R_1 , R_2 , R_3 , R_4 and R_5 are independently in each CTM structure selected from hydrogen, an alkyl group having 1 to about 6 carbon atoms, or an alkoxy group having 1 to about 6 carbon atoms.

75. (Original) The electrophotographic element of Claim 54 wherein the first charge transport layer is an overcoat layer overlying the charge generation layer.

76. (Original) The electrophotographic element of Claim 54 wherein the condensed reaction product is prepared in a polar solvent medium.

77. (Previously Presented) The electrophotographic element of Claim 76 wherein the polar solvent medium comprises water.

78. (Previously Presented) The electrophotographic element of Claim 77 wherein the polar solvent medium further comprises a water-miscible organic solvent.

79. (Original) The electrophotographic element of Claim 78 wherein said water-miscible organic solvent is selected from the group consisting of methanol, ethanol, isopropyl alcohol, methyl isobutyl ketone, and mixtures thereof.

80. (Cancelled)

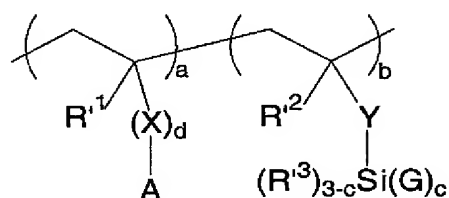
81. (Currently amended) An electrophotographic element comprising:

an electrically conducting layer;

a charge generating layer overlying said electrically conducting layer;

and

a first charge transport layer overlying said electrically conducting layer, said first charge transport layer comprising the condensed reaction product of a charge transport polymer comprising structural units having the formula:



wherein:

A is a tertiary arylamine charge transport moiety;

X is a divalent bridging moiety;

Y is a divalent bridging moiety;

R'¹ and R'² are independently hydrogen or a C₁₋₄ alkyl;

G is independently a hydrolyzable group;

R'³ is independently a C₁₋₁₈ alkyl, a C₁₋₁₀ fluoroalkyl, or a C₆₋₁₂ substituted or unsubstituted aryl;

c is an integer from 1 to 3;

d is 0 or 1;

a is a mole fraction of from about 0.01 to about 0.99;

b is a mole fraction of from about 0.99 to about 0.01; and

a + b is 1.00 or less,

with optionally at least one additional silane monomer having at least one functional group thereon;

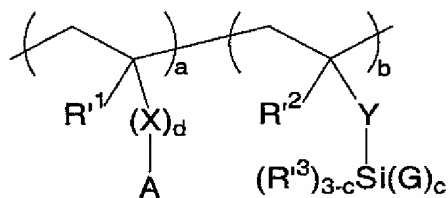
and further comprising a second charge transport layer disposed between said charge generating layer and said first charge transport layer wherein said second charge transport layer comprises the charge transport polymer.

82. (Currently amended) An electrophotographic element comprising:

an electrically conducting layer;

a charge generating layer overlying said electrically conducting layer; and

a first charge transport layer overlying said electrically conducting layer, said first charge transport layer comprising the condensed reaction product of a charge transport polymer comprising structural units having the formula:



wherein:

A is a tertiary arylamine charge transport moiety;

X is a divalent bridging moiety;

Y is a divalent bridging moiety;

R'1 and R'2 are independently hydrogen or a C₁₋₄ alkyl;

G is independently a hydrolyzable group;

R'3 is independently a C₁₋₁₈ alkyl, a C₁₋₁₀ fluoroalkyl, or a C₆₋₁₂ substituted or unsubstituted aryl;

c is an integer from 1 to 3;
d is 0 or 1;
a is a mole fraction of from about 0.01 to about 0.99;
b is a mole fraction of from about 0.99 to about 0.01; and
a + b is 1.00 or less,
with optionally at least one additional silane monomer having at least one functional group thereon;
and further comprising a second charge transport layer disposed between said charge generating layer and said first charge transport layer wherein said second charge transport layer comprises the condensed reaction residue of the charge transport polymer.

83. (Original) The electrophotographic element of Claim 54 further comprising a barrier layer overlying said electrically conducting layer.

84. (Original) The electrophotographic element of Claim 75 wherein said first charge transport layer has a thickness of about 0.5 micron to about 10 microns.

85. (Original) The electrophotographic element of Claim 75 wherein said first charge transport layer has a thickness of about 1 micron to about 3 microns.

86. (Original) The electrophotographic element of Claim 54 wherein the first charge transport layer has a thickness of up to about 40 microns.

87. (New) An electrophotographic element according to claim 82, wherein said first charge transport layer comprises a silsesquioxane of the condensed reaction product of the charge transport polymer and from about 5 to 30 weight percent of basic surface charge colloidal silica based on the weight of the

silsesquioxane, wherein the basic surface charge colloidal silica is stabilized with a sodium salt of silanol, and condensation is catalyzed by acetic acid, with optionally at least one additional silane monomer having at least one functional group thereon.

88. (New) The electrophotographic element of Claim 87 wherein G is selected from halogen, hydroxyl, or C₁₋₆ alkoxy groups.

89. (New) The electrophotographic element of Claim 87 wherein the tertiary amine charge transport moiety has an oxidation potential of from about 0.6 to about 1.2 volts versus a standard calomel electrode.

90. (New) The electrophotographic element of Claim 87 wherein d is 1.

91. (New) The electrophotographic element of Claim 87 wherein X is selected from the group consisting of an ester residue -COO- or -OCO-; oxygen; an arylene moiety having up to about 18 carbon atoms; an alkylene moiety having up to about 6 carbon atoms; and combinations thereof.

92. (New) The electrophotographic element of Claim 87 wherein Y is selected from the group consisting of an ester residue -COO- or -OCO-; oxygen; an arylene moiety having up to about 18 carbon atoms; an alkylene moiety having up to about 6 carbon atoms; and combinations thereof.

93. (New) The electrophotographic element of Claim 87 wherein a is from about 0.1 to about 0.9.

94. (New) The electrophotographic element of Claim 87 wherein a is from about 0.15 to about 0.85.

95. (New) The electrophotographic element of Claim 87 wherein a is from about 0.25 to about 0.8.

96. (New and withdrawn) The electrophotographic element of Claim 87 wherein c is 2.

97. (New) The electrophotographic element of Claim 87 wherein c is 3.

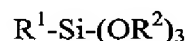
98. (New) The electrophotographic element of Claim 87 wherein R¹ and R² are independently hydrogen or methyl.

99. (New) The electrophotographic element of Claim 97 wherein G is methoxy.

100. (New) The electrophotographic element of Claim 87 wherein the optional at least one silane monomer is present.

101. (New) The electrophotographic element of Claim 100 wherein the at least one silane monomer is an alkyltrialkoxysilane.

102. (New) The electrophotographic element of Claim 100 wherein the at least one silane monomer is at least one alkyltrialkoxysilane corresponding to the formula:



wherein

R¹ is an aliphatic, cycloaliphatic, or aromatic group containing up to about 18 carbon atoms, and

R² is an alkyl group containing 1 to about 6 carbon atoms.

103. (New) The electrophotographic element of Claim 102 wherein R¹ is selected from the group consisting of alkyls containing up to about 18 carbon

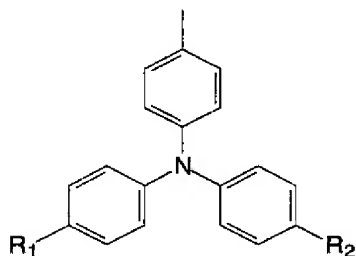
atoms, fluoroalkyl containing up to about 18 carbon atoms, cycloalkyl containing 5 to about 12 carbon atoms, and aryl containing 6 to about 12 carbon atoms.

104. (New) The electrophotographic element of Claim 102 wherein R^1 is an alkyl group containing 1 to about 3 carbon atoms.

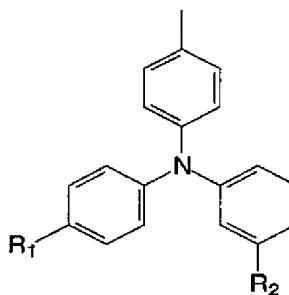
105. (New) The electrophotographic element of Claim 102 wherein R^1 is a methyl group.

106. (New) The electrophotographic element of Claim 100 wherein the at least one silane monomer is methyltrimethoxysilane.

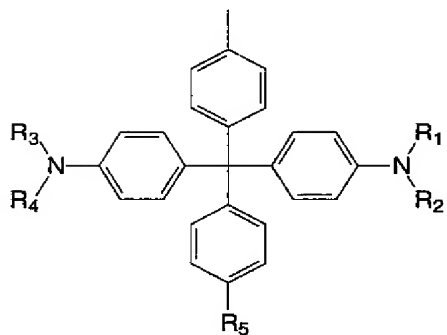
107. (New) The electrophotographic element of Claim 87 wherein A is selected from the group consisting of:



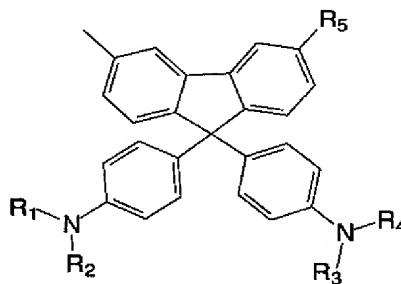
CTM I



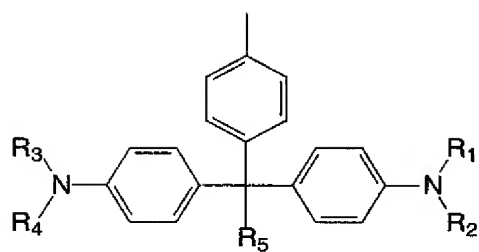
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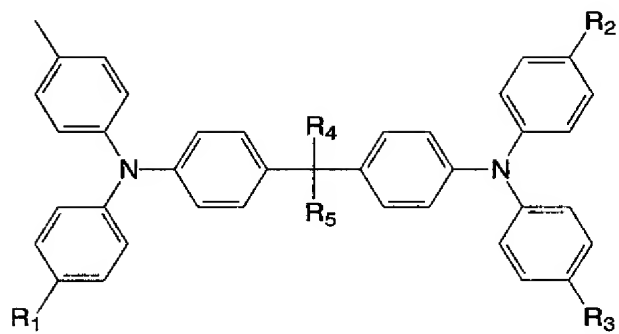
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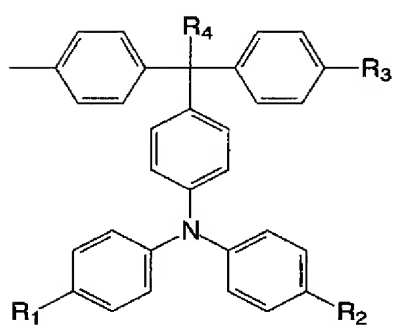
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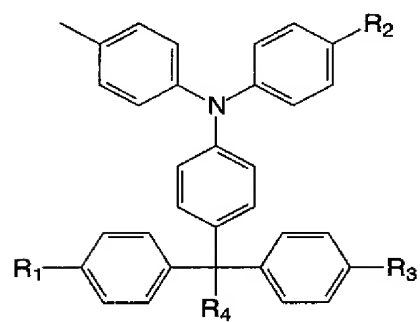
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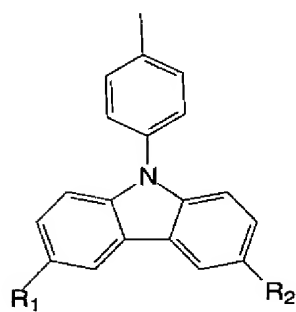
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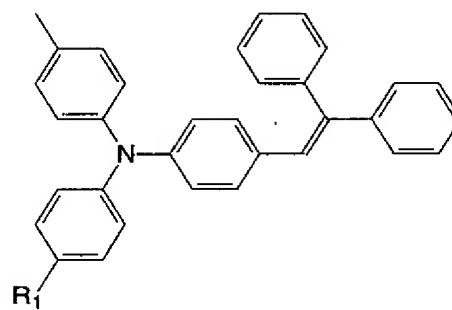
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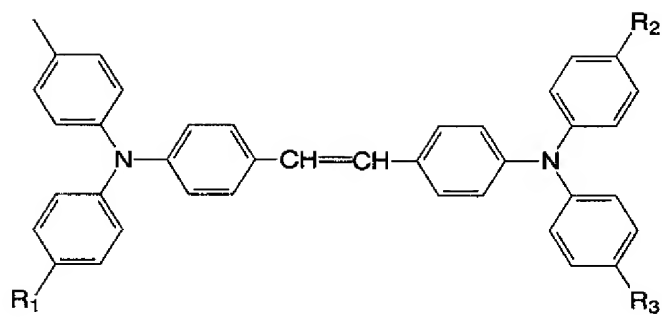
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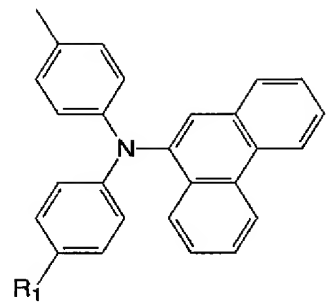
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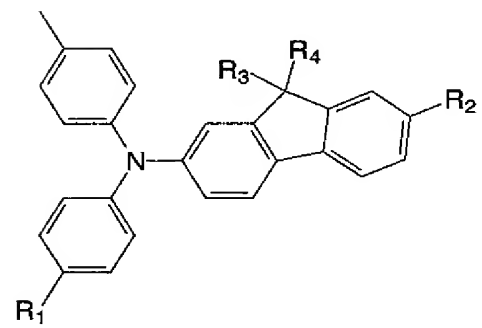
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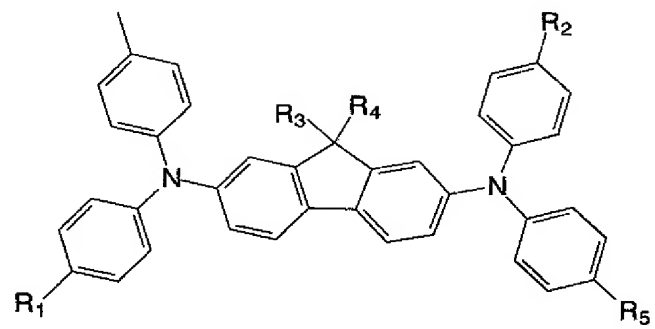
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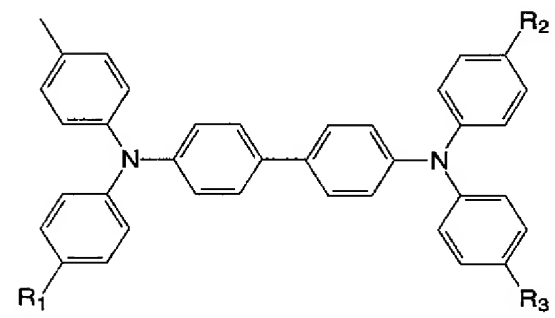
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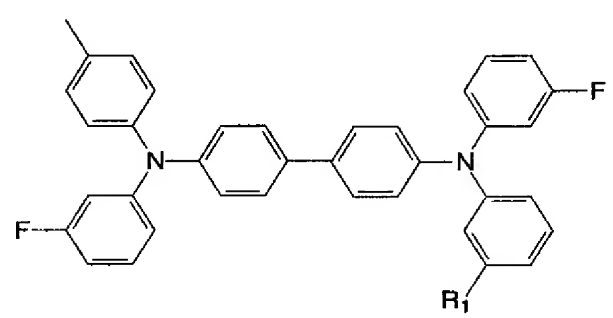
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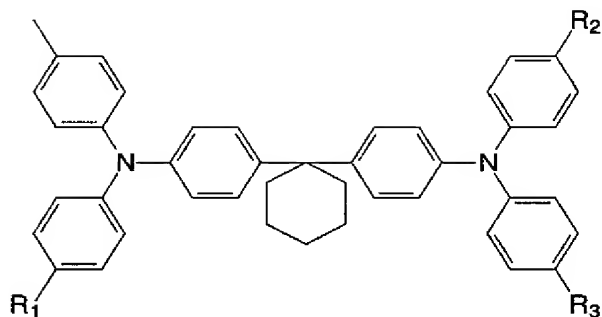
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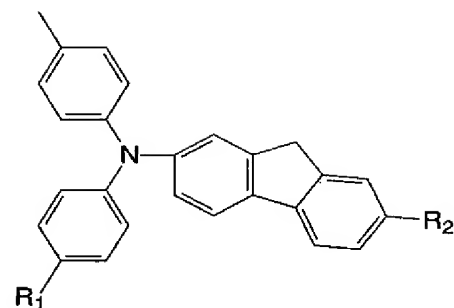
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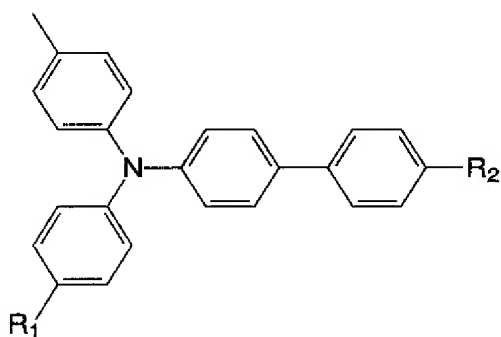
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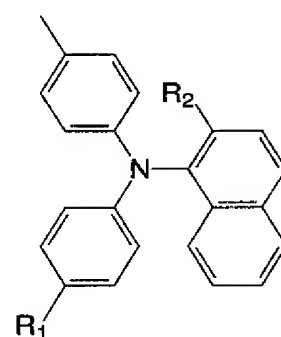
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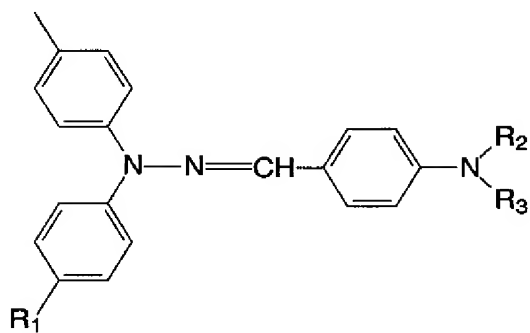
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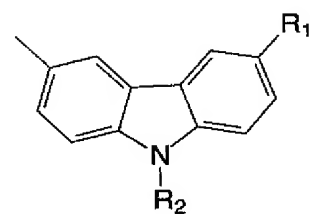
CTM XIX



CTM XX



CTM XXI



CTM XXII

and mixtures thereof, wherein R_1 , R_2 , R_3 , R_4 and R_5 are independently in each CTM structure selected from hydrogen, an alkyl group having 1 to about 6 carbon atoms, or an alkoxy group having 1 to about 6 carbon atoms.

108. (New) The electrophotographic element of Claim 87 wherein the first charge transport layer is an overcoat layer overlying the charge generation layer.

109. (New) The electrophotographic element of Claim 87 wherein the condensed reaction product is prepared in a polar solvent medium.

110. (New) The electrophotographic element of Claim 109 wherein the polar solvent medium comprises water.

111. (New) The electrophotographic element of Claim 110 wherein the polar solvent medium further comprises a water-miscible organic solvent.

112. (New) The electrophotographic element of Claim 111 wherein said water-miscible organic solvent is selected from the group consisting of methanol, ethanol, isopropyl alcohol, methyl isobutyl ketone, and mixtures thereof.

113. (New) The electrophotographic element of Claim 87 further comprising a barrier layer overlying said electrically conducting layer.

114. (New) The electrophotographic element of Claim 108 wherein said first charge transport layer has a thickness of about 0.5 micron to about 10 microns.

115. (New) The electrophotographic element of Claim 108 wherein said first charge transport layer has a thickness of about 1 micron to about 3 microns.

116. (New) The electrophotographic element of Claim 87 wherein the first charge transport layer has a thickness of up to about 40 microns.